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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/030,986	01/16/2002	Hitomi Kitamura	401530	9157
23548 7590 12/18/2003 LEYDIG VOIT & MAYER, LTD 700 THIRTEENTH ST. NW SUITE 300 WASHINGTON, DC 20005-3960			EXAMINER CUEVAS, PEDRO J	
			ART UNIT 2834	PAPER NUMBER

DATE MAILED: 12/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/030,986	Applicant(s) KITAMURA ET AL.	
	Examiner Pedro J. Cuevas	Art Unit 2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see pages 4-6, filed August 22, 2003, with respect to the rejection(s) of claim(s) 1-4 under 35 U.S.C. § 102 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of U.S. Patent No. 4,085,338 to Genrikh et al.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,264,856 to Frierdich et al. in view of U.S. Patent No. 4,085,338 to Genrikh et al.

Frierdich et al. clearly teaches the construction of system for maintaining excitation of an alternating current generator during excessive output current conditions comprising:

a voltage detecting means (47) for detecting a voltage of an output terminal of a synchronous machine;

a reactive current detecting means (27) for detecting a reactive current output from the synchronous machine;

a voltage setting means (41, 43, 45) for setting a reference voltage of the output terminal of the synchronous machine according to:

the reactive current detected by the reactive current detecting means,

a reference voltage of an output side of the transformer,
a phase compensation transfer function to quicken attenuation of an
electric power fluctuation, and
by the voltage setting means based on the voltage of the output terminal of
the synchronous machine detected by the voltage detecting means; and
a control means for controlling an exciting system (35) of the synchronous
machine according to a difference between the reference voltage set by the
voltage setting means and the voltage of the output terminal of the synchronous
machine detected by the voltage detecting means.

However, it fails to disclose a synchronous machine being connected to a power
transmission system through a transformer.

Genrikh et al. teach the construction of a high-voltage network for areas with high rate of
icing comprising a generator (1), a step-up transformer (2), and an aerial electric power
transmission line (3) for the purpose of providing a reduced time required for warming-up of the
conductors of aerial power transmission lines, and reducing emergency over-currents in elements
of the lines (column 2, lines 5-11).

It would have been obvious to one skilled in the art at the time the invention was made to
use the high-voltage network disclosed by Genrikh et al. with the system disclosed by Frierdich
et al. for the purpose of providing a reduced time required for warming-up of the conductors of
aerial power transmission lines, and reducing emergency over-currents in elements of the lines.

Art Unit: 2834

4. With regards to claims 3 and 4, Frierdich et al. in view of Genrikh et al. disclose an excitation control method, comprising:

detecting a voltage of an output terminal of a synchronous machine, which is connected to a power transmission system through a transformer, and includes setting the reference voltage of the output terminal of the synchronous machine based on the voltage of the output terminal of the synchronous machine;

detecting a reactive current output from the synchronous machine;

setting a reference voltage of the output terminal of the synchronous machine according to the reactive current, a reference voltage of an output side of the transformer, and setting a phase compensation transfer function to quicken attenuation of an electric power fluctuation; and

controlling an exciting system of the synchronous machine according to a difference between the reference voltage of the output terminal of the synchronous machine and the voltage of the output terminal of the synchronous machine;

as disclosed on column 4, lines 1-51 of Frierdich et al., and on column 10, line 5 to column 11, line 35 of Genrikh et al.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

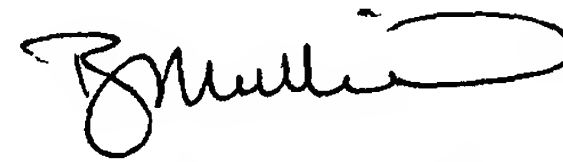
Art Unit: 2834

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pedro J. Cuevas whose telephone number is (703) 308-4904. The examiner can normally be reached on M-F from 8:30 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor R. Ramirez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Pedro J. Cuevas
December 4, 2003



BURTON S. MULLINS
PRIMARY EXAMINER